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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,126	04/16/2004	Hisao Inokuma	250931US0CONT	7963
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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BLACKWELL RUDASIL, GWENDOLYN A	
			ART UNIT	PAPER NUMBER
			1775	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,126

Applicant(s)

INOKUMA ET AL.

Examiner

Gwendolyn Blackwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-21 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8-10, 13-14, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-10 and 19 are indefinite as claims 8-10 are claiming a “colored low-reflectance conductive film” depending either directly or indirectly from claim 1 for claims 8-10 and claim 18 for claim 19. However, claim 1 is directed to “a low-reflectance conductive film”. There is nothing in claim 1 that mentions color. Clarification is required. To further prosecution the claim will be interpreted at a colored film formed on the opposite side of the substrate from the low-reflectance conductive film of claim 1.

Claims 13-14 are indefinite as it is not clear what an “X-coating liquid” is referring. Clarification is required. To further prosecution, the “X-coating liquid” will be interpreted as a general coating liquid.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-5, 11-13, 15, and 18-21 are rejected under 35 U.S.C. 102(a) as being anticipated by United States Patent Application Publication no. 2002/0145377, Nishizawa et al.

Regarding claims 1-3 and 5

Nishizawa et al disclose a cathode ray tube with a film formed on the outer surface of the panel, wherein the film is comprised of a light transmission control layer (conductive film) and a low refractive index layer (low-refraction film) that has a lower refractive index than the light transmission control layer. The light transmission control layer is comprised of particles such as silver, aluminum or silver sulfide (materials which are conductive), (page 1, sections 0011-0013 and page 3, section 0042). Table 4 lists the composition of the light transmission layer which is comprised of sulfonic acid and indium tin oxide particles, (page 5, section 0072), meeting the limitations of claims 1-3. The sulfonic acid compound is present in amount ranging between 0.1-10 mass% of the sulfur compound to the conductive fine particles, (page 5, section 0072), meeting the limitations of claim 5.

Regarding claims 7-8

The thickness of the light transmission control layer has a uniform thickness of 40 nm, (page 3, section 0051), and the low-refractive layer has a thickness of 70-80 nm, (page 4, section 0058), meeting the limitations of claim 7. A colored phosphor layer is formed on the inner surface of the panel, (page 13, section 31-36), meeting the limitations of claim 8.

Regarding claim 11-12

The dual layered film of Nishizawa et al is formed on a color cathode ray tube, (page 1, section 0010), meeting the limitations of claim 11. The low refractive portion of the film is

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formed as the outer portion of the dual layer, (page 1, section 0012), meeting the limitations of claim 12.

Regarding claims 13 and 15-16

Table 4 sets forth a coating liquid composition comprised of a ethyl alcohol (solvent), sulfonic acid (resistance-lowering material), and ITO particles, (page 5), meeting the limitations of claim 13. The low refractive index coating liquid composition is comprised of isopropyl alcohol (solvent), tetraethoxysilane (silicon compound), and thiourea (resistance lowering compound), (Table 2, page 4), meeting the limitations of claim 15. Another coating solution for the low-refractive index coating liquid is comprised of silicon lakeside containing theatric acid wherein the acid is present in an amount of 0.5 wt% and the silicon lakeside product is present in an amount of 1.0 wt%, (page 4, sections 0057-0061), meeting the limitations of claim 16.

Regarding claims 18 and 20

The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims is unpatentable even though the prior art was made by a different process. *MPEP 2113*.

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the prior art exemplifies the applicant's film structure, the claimed physical properties are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the limitations of claims 18 and 20.

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5. Claims 1-3, 5, 11-13, 15, and 18-21 are rejected under 35 U.S.C. 102(a) as being anticipated by International Patent Application Publication no. WO 01/98222 A1, WO '222.

Regarding claims 1 and 3

WO '222 disclose a transparent film coated substrate comprised of a substrate, an electroconductive layer (conductive film), and a transparent coating film (low-refraction film) formed on the surface of the electroconductive layer, (page 9, lines 18-22). The electroconductive layer is comprised of electroconductive particles, sulfonate salts, (page 22, lines 1-10), (resistance lowering material). A lower order titanium oxide can also be added to the coating solution, (page 17, 6-7). The transparent film has a refractive index lower than that of the electroconductive layer, (page 59, lines 3-18), meeting the limitations of claims 1 and 3.

Regarding claims 2 and 5

Antimony doped tin oxide and tin doped indium oxides can be used as the particles, (page 17, lines 3-6), meeting the limitations of claim 2. The sulfonate salts can be present in an amount ranging from 0.005 to 0.5 parts by weight, (page 22, lines 8-20), meeting the limitations of claim 5.

Regarding claims 7 and 11

The electroconductive layer has a thickness of 5-200 nm and the transparent coating film has a thickness ranging between 50-300 nm, (page 57, lines 23-25), meeting the limitations of claim 7. The dual layered film can be formed on the surface of display devices with the transparent coating film portion the outermost film, (page 59, lines 20-24), meeting the limitations of claim 11.

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Regarding claims 13, 15, and 17

The electroconductive coating composition is comprised of metal particles, (page 14, lines 8-24), ferrous sulfate (resistance lowering material), (page 15, lines 6-7), polar solvent, (page 17, lines 17-25), meeting the limitations of claim 13. The transparent coating film is comprised of a silicone component as well as silica, zirconium, titanic, and composite oxides made from the aforementioned materials, (page 46, lines 3-22), wherein the precursor to the silicone compound is an alkoxysilane, (page 49, lines 16-25), is present in an amount range from 0.05-10 wt% of the coating liquid, (page 56, lines 11-13). The oxide can be present in an amount ranging between 1-30wt%, (page 51, lines 3-9). A solvent is also used in the composition, (page 53, lines 23-25), meeting the limitations of claims 15 and 17.

Regarding claims 18, 20, and 21

The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims is unpatentable even though the prior art was made by a different process, meeting the limitations of claims 18, 20, and 21. *MPEP 2113*.

Allowable Subject Matter

6. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art of record while disclosing that the resistance lowering material may comprise sulfur does not teach or suggest a resistance lowering material such as titanium oxide

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added to the conductive film. Such an addition not only lowers the surface resistance of the overall film, but also improves the film's electromagnetic wave shielding capabilities.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell whose telephone number is (571) 272-1533. The examiner can normally be reached on Monday - Thursday; 5:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gwendolyn Blackwell
Examiner
Art Unit 1775


Gab


DEBORAH JONES
SUPERVISORY PATENT EXAMINER